

Proposal Full View

Applicant Information

Organization Name

City of San Bruno *

Tax ID

946000414

Proposal Name

South Westside Basin Shallow Groundwater Study *

Proposal Objective

The South Westside Groundwater Basin faces three primary challenges: groundwater production near the yield of the basin, nitrate concentrations that exceed MCLs in some wells, and the potential for seawater intrusion. The proposed project will provide information that can improve on existing information to better manage the basin. There are two main objectives for the proposed project: • Improve the understanding of recharge, allowing for improved modeling of the basin and improved decision making with regards to land use decisions, basin operations, and recharge projects. • Improve the understanding of the sources of nitrogen, to allow for management activities to reduce loading or remove nitrogen from the aquifer for non-potable use. In the southeastern portion of the basin, near San Bruno, finer grained materials slow the recharge of water from the surface to the deeper aquifer. However, it is not well understood how much of the water is recharged from the surface compared to water that is recharged in the foothills and enters the basin from the southwest. Also, the nature of the fine grained sediments that are inhibiting seawater intrusion into the basin are not well understood. The Proposed Project will improve the understanding of the recharge conditions, improving the ability to manage the basin through land use decisions, basin operations, and recharge projects. The northwestern portion of the basin, in the Daly City and South San Francisco areas, has experienced some instances of nitrate concentrations above MCLs. The source of the nitrogen is not well understood as there are several potential sources. The most likely sources have been considered historical cattle and dairy operations from the late 1880s and early 1900s, natural peat deposits, and landscape fertilization. The Proposed Project will improve the understanding of the nitrate conditions, improving the ability to reduce loading or remove nitrogen from the aquifer for non-potable use. *

Budget

Other Contribution

\$0.00

Local Contribution

\$0.00

Federal Contribution

\$0.00

Inkind Contribution

\$5,000.00

Amount Requested

\$249,660.00 *

Total Project Cost

\$254,660.00 *

Geographic Information

Latitude *

DD(+/-) 37 MM 38 SS 28

Longitude *

DD(+/-) 122 MM 24 SS 58

Longitude/Latitude Clarification

Location is a point within the South Westside Basin, which is the area of the Proposed Project

Location

South Westside Basin

County

San Mateo *

Ground Water Basin

Westside

Hydrologic Region

San Francisco Bay

Watershed

South Bay

Legislative Information

Assembly District
Senate District
US Congressional District

12th Assembly District, 19th Assembly District *
8th Senate District *
District 14 (CA) *

Project Information

Project Name

South Westside Basin Shallow Groun

| | |
|-------------------------------------|---|
| Implementing Organization | City of San Bruno |
| Secondary Implementing Organization | |
| Proposed Start Date | 5/1/2013 |
| Proposed End Date | 1/31/2015 |
| Project Scope | Due to 125 character limitation in this field, please see Attachment 5 of the Proposal, in lieu of this field. |
| Project Description | <p>The proposed South Westside Basin Shallow Groundwater Study improves the overall technical understanding of the shallow groundwater system in the South Westside Groundwater Basin. This includes improvements in the understanding of recharge to the water table, deeper aquifer system, and improved understanding of the nitrate sources in the shallow and deep aquifer system. The project includes the following six major technical areas: • Defining lithology of the upper subsurface • Collecting, analyzing, and mapping groundwater elevation data • Assessing groundwater quality using existing and supplemental data collected as part of this study • Collecting, sampling, and analyzing stable isotope data • Performing age dating • Estimating groundwater recharge and modeling groundwater transport</p> <p>Together, these technical analyses will lead to an improved understanding of water table conditions, the shallow groundwater system, and the relationships between recharge and deep water supply aquifer quantity and quality. With this information, San Bruno will be better able to develop recharge projects, including low impact development techniques; guide future land use and water use decisions; more reliably model and analyze groundwater conditions; and address nitrate and other water quality concerns in the basin.</p> |
| Project Objective | <p>There are two main objectives for the proposed project: • Improve the understanding of recharge, allowing for improved modeling of the basin and improved decision making with regards to land use decisions, basin operations, and recharge projects. • Improve the understanding of the sources of nitrogen, to allow for management activities to reduce loading or remove nitrogen from the aquifer for non-potable use.</p> |

Project Benefits Information

| Project Benefit Type | Benefit Type | Measurement | Description |
|----------------------|---|-------------|--|
| Primary | Water Restoration | 0 | Improved understanding of the source and extent of nitrate concentrations in the basin |
| Primary | Groundwater Management- Groundwater quality samples taken | 0 | Groundwater Quality Sampling for anions/cations, stable isotopes, and age dating parameters (tritium/helium-3) |
| | Stormwater | | Improved understanding of recharge and an |

| | | | |
|---------|--|---|--|
| Primary | Flood-Water Supply Enhancement | 0 | improved ability to site recharge projects and Low Impact Development projects |
| Primary | Water Storage -- Conjunctive-Water Supply Enhancement | 0 | Improved understanding of recharge conditions and nitrate sources to support ongoing regional conjunctive use opportunities in the basin |
| Primary | Water Storage -- Groundwater-Water Quality Improvement | 0 | Improved understanding of confining layers to assist in management of the groundwater basin to prevent seawater intrusion from San Francisco Bay |
| Primary | Modeling-Groundwater modeling developed or improved | 0 | Improved conceptual understanding of recharge to support future groundwater model updates |

Project Objective

Budget

| | |
|----------------------|-------------------------------------|
| Other Contribution | <input type="text" value="0"/> |
| Local Contribution | <input type="text" value="0"/> |
| Federal Contribution | <input type="text" value="0"/> |
| Inkind Contribution | <input type="text" value="5000"/> |
| Amount Requested | <input type="text" value="249660"/> |
| Total Project Cost | <input type="text" value="254660"/> |

Geographic Information

| | | | | | |
|-------------------|----------------------------------|----|---------------------------------|----|---------------------------------|
| Latitude DD(+/-) | <input type="text" value="37"/> | MM | <input type="text" value="38"/> | SS | <input type="text" value="28"/> |
| Longitude DD(+/-) | <input type="text" value="122"/> | MM | <input type="text" value="24"/> | SS | <input type="text" value="58"/> |

Longitude/Latitude Clarification

Location

County San Mateo Ground Water Basin Westside Hydrologic Region San Francisco Bay WaterShed
 South Bay

Legislative Information

| | |
|---------------------------|--|
| Assembly District | <input type="text" value="12th Assembly District,19th Assembly District"/> |
| Senate District | <input type="text" value="8th Senate District"/> |
| US Congressional District | <input type="text" value="District 14 (CA)"/> |

Section : Applicant Information and Question's Tab**APPLICANT INFORMATION AND QUESTION'S TAB****Q1. Applicant Information**

Provide the agency name, address, city, state, and zip code of the applicant submitting the application.

City of San Bruno 567 El Camino Real San Bruno, CA 94066-4299

Q2. Proposal Description:

Provide a brief abstract of the Proposal. This abstract must provide an overview of the proposal including the main issues and priorities addressed in the proposal. Within the abstract, please describe how the proposal relates to the GWMP's BMO's.

The South Westside Groundwater Basin faces three primary challenges: groundwater production near the yield of the basin, nitrate concentrations that exceed MCLs in some wells, and the potential for seawater intrusion. The proposed project will provide information that can improve on existing information to better manage the basin. There are two main objectives for the proposed project: * Improve the understanding of recharge, allowing for improved modeling of the basin and improved decision making with regards to land use decisions, basin operations, and recharge projects. * Improve the understanding of the sources of nitrogen, to allow for management activities to reduce loading or remove nitrogen from the aquifer for non-potable use. In the southeastern portion of the basin, near San Bruno, finer grained materials slow the recharge of water from the surface to the deeper aquifer. However, it is not well understood how much of the water is recharged from the surface compared to water that is recharged in the foothills and enters the basin from the southwest. Also, the nature of the fine grained sediments that are inhibiting seawater intrusion into the basin are not well understood.

The Proposed Project will improve the understanding of the recharge conditions, improving the ability to manage the basin through land use decisions, basin operations, and recharge projects. The northwestern portion of the basin, in the Daly City and South San Francisco areas, has experienced some instances of nitrate concentrations above MCLs. The source of the nitrogen is not well understood as there are several potential sources. The most likely sources have been considered historical cattle and dairy operations from the late 1880s and early 1900s, natural peat deposits, and landscape fertilization. The Proposed Project will improve the understanding of the nitrate conditions, improving the ability to reduce loading or remove nitrogen from the aquifer for non-potable use.

This improved understanding of recharge conditions through the proposed project will support the goal South Westside Basin Groundwater Management Plan (SWBGMP): To ensure a sustainable, high-quality, reliable water supply at a fair price for beneficial uses achieved through local groundwater management. The proposed project will help the basin meet BMO 1 (Maintain Acceptable Groundwater Levels) by focusing management efforts can on recharge projects that provide the highest benefit to the basin, thereby increasing the volume of water that can be sustainably used for beneficial uses; BMO 2 (Maintain or Improve Groundwater Quality) by reducing loading from sources (if sources are modern), managing nitrates already in the basin, and managing operations to prevent seawater intrusion; BMO 3 (Limit the Impact of Point Source Contamination) by improving the understanding of shallow clays that are assumed to be preventing deep migration of many contaminants; and BMO 5 (Manage the Interaction of Surface Water and Groundwater for the Benefit of Groundwater and Surface Water Quantity and Quality) by determining if there are opportunities to improve recharge from surface water courses or if the clays are too prevalent.

Q3. Project Director:

Provide the name and details (including email) of the person responsible for executing the grant agreement for the applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Director.

Connie Jackson City Manager Phone (650) 616-7056 Fax (650) 742-6515 email cjackson@sanbruno.ca.gov

Q4. Project Manager:

Provide the name and contact information (including email) of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.

Will Anderson Phone 650-616-7052 email wanderson@sanbruno.ca.gov

Q5. Additional Information:

Based on the region's location, what is the applicable DWR region office (Northern, North Central, South Central, or Southern)? The following link can be used to view each DWR region office boundaries:

http://www.water.ca.gov/groundwater/groundwater_basics/gw_contacts_info.cfm

- 1) ☐ Northern Region
- 2) ☒ North Central Region
- 3) ☐ South Central Region
- 4) ☐ Southern Region

Q6. Additional Information:

Provide the Date of GWMP Adoption, if any, and list the pursuant Water Code Section or other legal Authority in which it was adopted.

The South Westside Basin Groundwater Management Plan was adopted on July 10, 2012 pursuant to California Water Code Section 10750 et seq.

Q7. Additional Information:

management of the affected groundwater basin (e.g., MOUs, MOAs, JPAs, adoption of a GWMP, recognition of county ordinances in permitting processes, or party to a groundwater basin adjudication order).

The South Westside Basin Groundwater Management Plan was developed in a collaborative environment with other local public agencies, California Water Service Company, City of Daly City, and the San Francisco Public Utilities Commission. California Water Service Company, City of Daly City, and City of San Bruno formed the South Westside Basin Voluntary Cooperative Groundwater Monitoring Association to meet the requirements of CASGEM. This Association was established through a Letter of Mutual Understanding. The local agencies have also partnered to develop a regional groundwater flow model and to explore the potential for a regional conjunctive use project in the basin.

Q8. Additional Information

Name the entity(ies) providing the fund(s) reported in the above Budget section under the category "Other Contribution". If there are no "Other Contributions" Please answer this question with, "No Other Contributions".

The Cities of San Bruno and Daly City, and SFPUC will provide in-kind staff time.

Q9. Eligibility:

List the urban water suppliers that will receive funding from the proposed grant. Please provide the agency name, a contact phone number and email address. Those listed must submit self certification of compliance with CWC §525 et seq. and AB1420, see Attachment 10. If there are none, so indicate.

The City of San Bruno Will Anderson Phone 650-616-7052 email wanderson@sanbruno.ca.gov

Q10. Eligibility:

Have all of the urban water suppliers, listed in Q9 above, submitted complete 2010 UWMP to DWR? If not, explain why. Have those plans been verified as complete by DWR? If not, explain current status.

Yes

Q11. Completeness Check:

Have all of the fields in the application been completed?

Yes

Q.11. Completeness Check (cont)

If no, please explain. If yes, answer this question with "NA".

NA

Section : Application Attachments Tab

APPLICATION ATTACHMENTS TAB

Attachment 1. Authorizing Documentation

Upload authorizing documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att1_LGA12_San-Bruno_AuthDoc_1of1.pdf

Attachment 2. Eligible Applicant Documentation

Upload eligible documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att2_LGA12_San-Bruno_EligDoc_1of1.pdf

Attachment 3. Status of GWMP

Upload the GWMP documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att3_LGA12_San-Bruno_GWMP_2of5.pdf,Att3_LGA12_San-Bruno_GWMP_3of5.pdf,Att3_LGA12_San-Bruno_GWMP_4of5.pdf,Att3_LGA12_San-Bruno_GWMP_5of5.pdf,Att3_LGA12_San-Bruno_GWMP_1of5.pdf

Attachment 4. Project Description

Upload project description here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att4_LGA12_San-Bruno_ProjD_1of1.pdf

Attachment 5. Work Plan

Upload work plan here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att5_LGA12_San-Bruno_WrkPln_1of1.pdf

Attachment 6. Budget

Upload budget here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att6_LGA12_San-Bruno_BUDGET_1of1.pdf

Attachment 7. Schedule

Upload schedule here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att7_LGA12_San-Bruno_SCHED_1of2.pdf,Att7_LGA12_San-Bruno_SCHED_2of2.pdf

Attachment 8. Quality Assurance

Upload quality assurance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att8_LGA12_San-Bruno_QA_1of1.pdf

Attachemnt 9. Past Performance

Upload past performance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att9_LGA12_San-Bruno_PERFORM_1of2.pdf,Att9_LGA12_San-Bruno_PERFORM_2of2.pdf

Attachment 10. AB1420 and Water Meter Implementation Compliance

Upload 1420 and water meter implementation documentation here, if applicable. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att10_LGA12_San-Bruno_1420_1of2.pdf,Att10_LGA12_San-Bruno_1420_2of2.pdf
